



SEQUENCE LISTING

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<120> NOVEL PEPTIDES AND PRODUCTION AND USE THEREOF

<130> 48811 (342)

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<151> 1996-10-15

<150> PCT/JP97/01911

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<160> 114

<170> PatentIn Ver. 2.0

<210> 1

<211> 17

<212> PRT

<213> Homo sapiens

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Asp Arg Met Pro Cys Arg Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys
1 5 10 15

Lys

<210> 2

<211> 15

<212> PRT

<213> Homo sapiens

<400> 2

Met Pro Cys Arg Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys Lys
1 5 10 15

<210> 3

<211> 13

<212> PRT

<213> Homo sapiens

Sub E22

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Cys Arg Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys Lys
1 5 10

<210> 4

<211> 29

<212> PRT

<213> Homo sapiens

<400> 4

Gln Glu Gly Ala Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro
1 5 10 15

Cys Arg Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys Lys
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<210> 5

<211> 62

<212> PRT

<213> Homo sapiens

<400> 5

Ser Ser Leu Leu Thr Phe Leu Ala Trp Trp Phe Glu Trp Thr Ser Gln
1 5 10 15

Ala Ser Ala Gly Pro Leu Ile Gly Glu Glu Ala Arg Glu Val Ala Arg
20 25 30

Arg Gln Glu Gly Ala Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met
35 40 45

Pro Cys Arg Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys Lys
50 55 60

<210> 6

<211> 85

<212> PRT

<213> Homo sapiens

<400> 6

Leu Pro Leu Glu Gly Gly Pro Thr Gly Arg Asp Ser Glu His Met Gln
1 5 10 15

Glu Ala Ala Gly Ile Arg Lys Ser Ser Leu Leu Thr Phe Leu Ala Trp
20 25 30

Trp Phe Glu Trp Thr Ser Gln Ala Ser Ala Gly Pro Leu Ile Gly Glu
35 40 45

Glu Ala Arg Glu Val Ala Arg Arg Gln Glu Gly Ala Pro Pro Gln Gln
50 55 60

Ser Ala Arg Arg Asp Arg Met Pro Cys Arg Asn Phe Phe Trp Lys Thr
65 70 75 80

Sub
E22
cont

Phe Ser Ser Cys Lys
85

<210> 7

<211> 105

<212> PRT

<213> Homo sapiens

<400> 7

Met Pro Leu Ser Pro Gly Leu Leu Leu Leu Leu Ser Gly Ala Thr
1 5 10 15

Ala Thr Ala Ala Leu Pro Leu Glu Gly Gly Pro Thr Gly Arg Asp Ser
20 25 30

Glu His Met Gln Glu Ala Ala Gly Ile Arg Lys Ser Ser Leu Leu Thr
35 40 45

Phe Leu Ala Trp Trp Phe Glu Trp Thr Ser Gln Ala Ser Ala Gly Pro
50 55 60

Leu Ile Gly Glu Glu Ala Arg Glu Val Ala Arg Arg Gln Glu Gly Ala
65 70 75 80

Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro Cys Arg Asn Phe
85 90 95

Phe Trp Lys Thr Phe Ser Ser Cys Lys
100 105

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<211> 12

<212> PRT

<213> Homo sapiens

<400> 8

Gln Glu Gly Ala Pro Pro Gln Gln Ser Ala Arg Arg
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<210> 9

<211> 33

<212> PRT

<213> Homo sapiens

<400> 9

Ser Ser Leu Leu Thr Phe Leu Ala Trp Trp Phe Glu Trp Thr Ser Gln
1 5 10 15

Ala Ser Ala Gly Pro Leu Ile Gly Glu Glu Ala Arg Glu Val Ala Arg
20 25 30

Arg

Sub
E22
cont

<210> 10
<211> 23
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<213> Homo sapiens

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Leu Pro Leu Glu Gly Gly Pro Thr Gly Arg Asp Ser Glu His Met Gln
1 5 10 15

Glu Ala Ala Gly Ile Arg Lys
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<210> 11
<211> 20
<212> PRT
<213> Homo sapiens

<400> 11
Met Pro Leu Ser Pro Gly Leu Leu Leu Leu Leu Ser Gly Ala Thr
1 5 10 15

Ala Thr Ala Ala
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<210> 12
<211> 88
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<213> Homo sapiens

<400> 12
Met Pro Leu Ser Pro Gly Leu Leu Leu Leu Leu Ser Gly Ala Thr
1 5 10 15

Ala Thr Ala Ala Leu Pro Leu Glu Gly Gly Pro Thr Gly Arg Asp Ser
20 25 30

Glu His Met Gln Glu Ala Ala Gly Ile Arg Lys Ser Ser Leu Leu Thr
35 40 45

Phe Leu Ala Trp Trp Phe Glu Trp Thr Ser Gln Ala Ser Ala Gly Pro
50 55 60

Leu Ile Gly Glu Glu Ala Arg Glu Val Ala Arg Arg Gln Glu Gly Ala
65 70 75 80

Pro Pro Gln Gln Ser Ala Arg Arg
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<211> 45
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45

<210> 15
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tgcaggaact tcttctggaa gaccttctcc tcttgcaaa

39

<210> 16
<211> 87
<212> DNA
<213> Homo sapiens

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ttctggaaga ctttctcttc ctgcaaa

87

<210> 17
<211> 87
<212> DNA
<213> Homo sapiens

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caggaaggcg cccccccca gcaatctgcg cgccgggaca gaatgccctg caggaacttc 60
ttctggaaga ctttctcttc ctgcaaa

87

<210> 18
<211> 186
<212> DNA
<213> Homo sapiens

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ccctcatag gagaggaagc tcgggaggtg gccaggggc aggaaggcgc accccccag 120
caatccgcgc gccgggacag aatgccctgc aggaactttt tctggaagac cttctctctc 180
tgcaaa

186

Sub
E22
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<211> 186
<212> DNA
<213> Homo sapiens

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cccctcatag gagaggaagc tcgggaggtg gccaggcggc aggaaggcgc accccccag 120
caatctgagc gccgggacag aatgccctgc aggaacttct tctggaagac cttctcctcc 180
tgcaaa 186

<210> 20
<211> 255
<212> DNA
<213> Homo sapiens

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agtgccgggc ccctcatagg agaggaagct cgggaggtgg ccaggcggca ggaaggcgca 180
cccccccagc aatccgcgcg ccgggacaga atgccctgca ggaacttctt ctggaagacc 240
ttctcctcct gcaaa 255

<210> 21
<211> 255
<212> DNA
<213> Homo sapiens

<400> 21
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ataaggaaaa gcagcctcct gactttcctc gcttggtggt ttgagtggac ctcccaggcc 120
agtgccgggc ccctcatagg agaggaagct cgggaggtgg ccaggcggca ggaaggcgca 180
cccccccagc aatctgcgcg ccgggacaga atgccctgca ggaacttctt ctggaagacc 240
ttctcctcct gcaaa 255

<210> 22
<211> 315
<212> DNA
<213> Homo sapiens

<400> 22
atgccattgt cccccggcct cctgctgctg ctgctctccg gggccacggc caccgctgcc 60
ctgcccctgg aggggtggccc caccggccga gacagcgagc atatgcagga agcggcagga 120

Sub
E22
cont

ataaggaaaa gcagcctcct gactttcctc gcttgggtgg ttgagtggac ctcccaggcc 180
 agtgccgggc ccctcatagg agaggaagct cgggaggtgg ccaggcggca ggaaggcgca 240
 cccccccagc aatccgcgcg ccgggacaga atgccttgca ggaacttctt ctggaagacc 300
 ttctcctcct gcaaa 315

<210> 23
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<400> 23
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 ataaggaaaa gcagcctcct gactttcctc gcttgggtgg ttgagtggac ctcccaggcc 180
 agtgccgggc ccctcatagg agaggaagct cgggaggtgg ccaggcggca ggaaggcgca 240
 cccccccagc aatctgcgcg ccgggacaga atgccttgca ggaacttctt ctggaagacc 300
 ttctcctcct gcaaa 315

<210> 24
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<210> 25
 <211> 36
 <212> DNA
 <213> Homo sapiens

<400> 25
 caggaaggcg cccccccca gcaatctgcg cgccgg 36

<210> 26
 <211> 99
 <212> DNA
 <213> Homo sapiens

<400> 26
 agcagcctcc tgactttcct cgcttgggtg ttgagtggga cctcccaggc cagtgccggg 60
 ccctcatag gagaggaagc tcgggaggtg gccaggcg 99

Sub
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<210> 27
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<212> DNA
<213> Homo sapiens

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ataaggaaa 69

<210> 28
<211> 60
<212> DNA
<213> Homo sapiens

<400> 28
atgccattgt cccccggcct cctgctgctg ctgctctccg gggccacggc caccgctgcc 60

<210> 29
<211> 264
<212> DNA
<213> Homo sapiens

<400> 29
atgccattgt cccccggcct cctgctgctg ctgctctccg gggccacggc caccgctgcc 60
ctgcccctgg aggggtggccc caccggccga gacagcgagc atatgcagga agcggcagga 120
ataaggaaaa gcagcctcct gactttcttc gcttggtggt ttgagtggac ctcccaggcc 180
agtgccgggc cctcatagg agaggaagct cgggaggtgg ccaggcggca ggaaggcgca 240
cccccccagc aatccgcgcg ccgg 264

<210> 30
<211> 264
<212> DNA
<213> Homo sapiens

<400> 30
atgccattgt cccccggcct cctgctgctg ctgctctccg gggccacggc caccgctgcc 60
ctgcccctgg aggggtggccc caccggccga gacagcgagc atatgcagga agcggcagga 120
ataaggaaaa gcagcctcct gactttcttc gcttggtggt ttgagtggac ctcccaggcc 180
agtgccgggc cctcatagg agaggaagct cgggaggtgg ccaggcggca ggaaggcgca 240
cccccccagc aatctgcgcg ccgg 264

<210> 31
<211> 14
<212> PRT
<213> Rattus

Sub
E22
cont

<400> 31

Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys Lys
1 5 10

<210> 32

<211> 14

<212> PRT

<213> Rattus

<400> 32

Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
1 5 10

<210> 33

<211> 42

<212> DNA

<213> Rattus

<400> 33

ccctgcaaga acttcttctg gaaaaccttc tctctgtgca ag

42

<210> 34

<211> 42

<212> DNA

<213> Rattus

<400> 34

gctggctgca agaacttctt ctggaagaca ttcacatcct gt

42

<210> 35

<211> 16

<212> PRT

<213> Homo sapiens

<400> 35

Asp Arg Met Pro Cys Arg Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys
1 5 10 15

<210> 36

<211> 14

<212> PRT

<213> Homo sapiens

<400> 36

Met Pro Cys Arg Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys
1 5 10

<210> 37

<211> 12

<212> PRT

<213> Homo sapiens

See
E22
cont

<400> 37

Cys Arg Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys
1 5 10

<210> 38

<211> 17

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
amino acid

<400> 38

Asp Arg Met Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys
1 5 10 15

Lys

<210> 39

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
amino acid

<400> 39

Met Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys Lys
1 5 10 15

<210> 40

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
amino acid

<400> 40

Cys Lys Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys Lys
1 5 10

<210> 41

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

Sub
E22
cont

amino acid

<400> 41

Asp Arg Met Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys
1 5 10 15

<210> 42

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
amino acid

<400> 42

Met Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys
1 5 10

<210> 43

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
amino acid

<400> 43

Cys Lys Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys
1 5 10

<210> 44

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
amino acid

<400> 44

Asp Arg Met Pro Cys Arg Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
1 5 10 15

Lys

<210> 45

<211> 15

<212> PRT

<213> Artificial Sequence

See
E22
cmr

<220>

<223> Description of Artificial Sequence: Synthetic amino acid

<400> 45

Met Pro Cys Arg Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys Lys
1 5 10 15

<210> 46

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic amino acid

<400> 46

Cys Arg Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys Lys
1 5 10

<210> 47

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic amino acid

<400> 47

Asp Arg Met Pro Cys Arg Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
1 5 10 15

<210> 48

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic amino acid

<400> 48

Met Pro Cys Arg Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
1 5 10

<210> 49

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

See
E32
cont

amino acid

<400> 49

Cys Arg Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
1 5 10

<210> 50

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
amino acid

<400> 50

Asp Arg Met Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
1 5 10 15

Lys

<210> 51

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
amino acid

<400> 51

Met Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys Lys
1 5 10 15

<210> 52

<211> 13

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
amino acid

<400> 52

Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys Lys
1 5 10

<210> 53

<211> 16

<212> PRT

<213> Artificial Sequence

*Sub
E22
ant*

<220>

<223> Description of Artificial Sequence: Synthetic amino acid

<400> 53

Asp Arg Met Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
1 5 10 15

<210> 54

<211> 14

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic amino acid

<400> 54

Met Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
1 5 10

<210> 55

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic amino acid

<400> 55

Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
1 5 10

<210> 56

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic amino acid

<400> 56

Gln Glu Gly Ala Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro
1 5 10 15

Cys Lys Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys Lys
20 25

<210> 57

<211> 29

<212> PRT

<213> Artificial Sequence

Sub
E22
cont

<220>

<223> Description of Artificial Sequence: Synthetic amino acid

<400> 57

Gln Glu Gly Ala Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro
1 5 10 15

Cys Arg Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys Lys
20 25

<210> 58

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic amino acid

<400> 58

Gln Glu Gly Ala Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro
1 5 10 15

Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys Lys
20 25

<210> 59

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic amino acid

<400> 59

Gln Glu Gly Ala Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro
1 5 10 15

Cys Lys Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys
20 25

<210> 60

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic amino acid

Sub
E22
cont

<400> 60

Gln Glu Gly Ala Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro
1 5 10 15

Cys Arg Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
20 25

<210> 61

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
amino acid

<400> 61

Gln Glu Gly Ala Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro
1 5 10 15

Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
20 25

<210> 62

<211> 48

<212> DNA

<213> Homo sapiens

<400> 62

gacagaatgc cctgcaggaa cttcttcttg aagaccttct cctcctgc

48

<210> 63

<211> 42

<212> DNA

<213> Homo sapiens

<400> 63

atgccctgca ggaacttctt ctggaagacc ttctcctcct gc

42

<210> 64

<211> 36

<212> DNA

<213> Homo sapiens

<400> 64

tgcaggaact tcttctggaa gaccttctcc tctcgc

36

<210> 65

<211> 51

<212> DNA

<213> Artificial Sequence

Sub
E22
cont

<220>

<223> Description of Artificial Sequence: Synthetic DNA

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gacagaatgc cctgcaaraa cttcttcttg aagaccttct cctcctgcaa a

51

<210> 66

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 66

atgccctgca araacttctt ctggaagacc ttctcctcct gcaaa

45

<210> 67

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 67

tgcaaraact tcttctggaa gaccttctcc tctcgaaa

39

<210> 68

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

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51

<210> 69

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 69

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45

<210> 70

<211> 39

<212> DNA

Sub
E22
cont

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 70

tgcaaraact tcttctggaa gaccttctcc tcttgcaaa

39

<210> 71

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<220>

<223> "n" may be A, T, C, G, other or unknown

<400> 71

gacagaatgc cctgcaggaa cttcttctgg aagaccttct ccacntgcaa a

51

<210> 72

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

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<223> "n" may be A, T, C, G, other or unknown

<400> 72

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45

<210> 73

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<220>

<223> "n" may be A, T, C, G, other or unknown

<400> 73

tgcaggaact tcttctggaa gaccttcacn tcttgcaaa

39

<210> 74

<211> 48

<212> DNA

<213> Artificial Sequence

Sub
E22
cont

<220>
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<220>
<223> "n" may be A, T, C, G, other or unknown

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gacagaatgc cctgcaggaa cttcttctgg aagaccttct ccacntgc

48

<210> 75
<211> 42
<212> DNA
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<220>
<223> Description of Artificial Sequence: Synthetic DNA

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<223> "n" may be A, T, C, G, other or unknown

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42

<210> 76
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
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<220>
<223> "n" may be A, T, C, G, other or unknown

<400> 76
tgcaggaact tcttctggaa gaccttcacn tcctgc

36

<210> 77
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<223> "n" may be A, T, C, G, other or unknown

<400> 77
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51

<210> 78
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Sub
E22
cont

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<223> Description of Artificial Sequence: Synthetic DNA

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<223> "n" may be A, T, C, G, other or unknown

<400> 78

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45

<210> 79

<211> 39

<212> DNA

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<223> Description of Artificial Sequence: Synthetic DNA

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<223> "n" may be A, T, C, G, other or unknown

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<210> 80

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<220>

<223> "n" may be A, T, C, G, other or unknown

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<210> 81

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<220>

<223> "n" may be A, T, C, G, other or unknown

<400> 81

atgccctgca araacttctt ctggaagacc ttcacntcct gcaaa

45

Sub
E22
cont

<210> 82
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<220>
<223> "n" may be A, T, C, G, other or unknown

<400> 82
tgcaaraact ttttctggaa gaccttcacn tcctgc

36

<210> 83
<211> 87
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<400> 83
caggaaggcg cccccccca gcaatccgcg cgccgggaca gaatgccctg caaraacttc 60
ttctggaaga ctttctctc ctgcaaa

87

<210> 84
<211> 87
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<400> 84
caggaaggcg cccccccca gcaatccgcg cgccgggaca gaatgccctg caaraacttc 60
ttctggaaga ctttctctc ctgcaaa

87

<210> 85
<211> 87
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<220>
<223> "n" may be A, T, C, G, other or unknown

<400> 85
caggaaggcg cccccccca gcaatccgcg cgccgggaca gaatgccctg caggaacttc 60
ttctggaaga ctttcacntc ctgcaaa

87

Sub
E22
cont

<210> 86
<211> 87
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<220>
<223> "n" may be A, T, C, G, other or unknown

<400> 86
caggaaggcg cccccccca gcaatctgcg cgccgggaca gaatgccctg caggaacttc 60
ttctggaaga ccttcacntc ctgcaaa 87

<210> 87
<211> 87
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<220>
<223> "n" may be A, T, C, G, other or unknown

<400> 87
caggaaggcg cccccccca gcaatccgcg cgccgggaca gaatgccctg caaraacttc 60
ttctggaaga ccttcacntc ctgcaaa 87

<210> 88
<211> 87
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<220>
<223> "n" may be A, T, C, G, other or unknown

<400> 88
caggaaggcg cccccccca gcaatctgcg cgccgggaca gaatgccctg caaraacttc 60
ttctggaaga ccttcacntc ctgcaaa 87

<210> 89
<211> 84
<212> DNA
<213> Artificial Sequence

Sub
E22
cont

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 89

caggaaggcg cccccccca gcaatccgcg cgccgggaca gaatgccctg caaraacttc 60

ttctggaaga ctttctcctc ctgc

84

<210> 90

<211> 84

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 90

caggaaggcg cccccccca gcaatctgcg cgccgggaca gaatgccctg caaraacttc 60

ttctggaaga ctttctcctc ctgc

84

<210> 91

<211> 84

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<220>

<223> "n" may be A, T, C, G, other or unknown

<400> 91

caggaaggcg cccccccca gcaatccgcg cgccgggaca gaatgccctg caggaacttc 60

ttctggaaga ctttcacntc ctgc

84

<210> 92

<211> 84

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<220>

<223> "n" may be A, T, C, G, other or unknown

<400> 92

caggaaggcg cccccccca gcaatctgcg cgccgggaca gaatgccctg caggaacttc 60

ttctggaaga ctttcacntc ctgc

84

Sub
E22
cont

<210> 93
<211> 84
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<220>
<223> "n" may be A, T, C, G, other or unknown

<400> 93
caggaaggcg cccccccca gcaatccgcg cgccgggaca gaatgccctg caaraacttc 60
ttctggaaga cttcacntc ctgc 84

<210> 94
<211> 84
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<220>
<223> "n" may be A, T, C, G, other or unknown

<400> 94
caggaaggcg cccccccca gcaatctgcg cgccgggaca gaatgccctg caaraacttc 60
ttctggaaga cttcacntc ctgc 84

<210> 95
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<400> 95
ggtcgacctc agctaggatg ttccccaatg 30

<210> 96
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<400> 96
ggtcgaccgc ggctcagagc gtcgtgat 28

Sub
E22
cont

<210> 97
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<400> 97
ggtcgacacc atggacatgg cggatgag

28

<210> 98
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<400> 98
ggtcgacagt tcagatactg gtcttg

26

<210> 99
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<400> 99
ggtcgacctc aaccatggac atgcttcac

30

<210> 100
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<400> 100
ggtcgacttt ccccaggccc ctacaggta

29

<210> 101
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<400> 101
ggctcgagtc accatgagcg cccctc

28

See
E22
cont

<210> 102

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 102

gggctcgagc tcttcagaag gtggtgg

27

<210> 103

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 103

ggtcgaccac catggagccc ctgttccc

28

<210> 104

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 104

ccgtcgacac tctcacagct tgctgg

26

<210> 105

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

<400> 105

acaagatgcc attgtccccc ggcctcct

28

<210> 106

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic DNA

Sub
E22
cont

<400> 106
ttcaggtctg taattaaact tgcgtga

27

<210> 107
<211> 368
<212> DNA
<213> Homo sapiens

<220>
<223> Description of Artificial Sequence: Synthetic DNA

<400> 107
acaagatgcc attgtcccc gccctcctgc tgctgctgct ctccggggcc acggccaccg 60
ctgccctgcc cctggagggt ggccccaccg gccgagacag cgagcatatg caggaagcgg 120
caggaataag gaaaagcagc ctctgactt tctcgttg gtggtttgag tggacctccc 180
aggccagtgc cgggcccctc ataggagagg aagctcggga ggtggccagg cggcaggaag 240
gcgcaccccc ccagcaatcc ggcgcgcggg acagaatgcc ctgcaggaac ttcttctgga 300
agaccttctc ctctgcaaa taaaacctca cccatgaatg ctcacgcaag tttaattaca 360
gacctgaa 368

<210> 108
<211> 366
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (4)...(318)

*Sub
E22
cont*

<400> 108
aag atg cca ttg tcc ccc ggc ctc ctg ctg ctg ctg ctc tcc ggg gcc 48
Met Pro Leu Ser Pro Gly Leu Leu Leu Leu Leu Leu Ser Gly Ala
1 5 10 15
acg gcc acc gct gcc ctg ccc ctg gag ggt ggc ccc acc ggc cga gac 96
Thr Ala Thr Ala Ala Leu Pro Leu Glu Gly Gly Pro Thr Gly Arg Asp
20 25 30
agc gag cat atg cag gaa gcg gca gga ata agg aaa agc agc ctc ctg 144
Ser Glu His Met Gln Glu Ala Ala Gly Ile Arg Lys Ser Ser Leu Leu
35 40 45
act ttc ctc gct tgg tgg ttt gag tgg acc tcc cag gcc agt gcc ggg 192
Thr Phe Leu Ala Trp Trp Phe Glu Trp Thr Ser Gln Ala Ser Ala Gly
50 55 60
ccc ctc ata gga gag gaa gct cgg gag gtg gcc agg cgg cag gaa ggc 240
Pro Leu Ile Gly Glu Glu Ala Arg Glu Val Ala Arg Arg Gln Glu Gly
65 70 75

gca ccc ccc gag caa tcc gcg cgc cgg gac aga atg ccc tgc agg aac 288
Ala Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro Cys Arg Asn
80 85 90 95

ttc ttc tgg aag acc ttc tcc tcc tgc aaa taaaacctca cccatgaatg 338
Phe Phe Trp Lys Thr Phe Ser Ser Cys Lys
100 105

ctcagcgaag, tttaattaca gacctgaa 366

<210> 109
<211> 105
<212> PRT
<213> Homo sapiens

<400> 109
Met Pro Leu Ser Pro Gly Leu Leu Leu Leu Leu Leu Ser Gly Ala Thr
1 5 10 15

Ala Thr Ala Ala Leu Pro Leu Glu Gly Gly Pro Thr Gly Arg Asp Ser
20 25 30

Glu His Met Gln Glu Ala Ala Gly Ile Arg Lys Ser Ser Leu Leu Thr
35 40 45

Phe Leu Ala Trp Trp Phe Glu Trp Thr Ser Gln Ala Ser Ala Gly Pro
50 55 60

Leu Ile Gly Glu Glu Ala Arg Glu Val Ala Arg Arg Gln Glu Gly Ala
65 70 75 80

Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro Cys Arg Asn Phe
85 90 95

Phe Trp Lys Thr Phe Ser Ser Cys Lys
100 105

<210> 110
<211> 318
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1)..(315)

<400> 110
atg cca ttg tcc ccc ggc ctc ctg ctg ctg ctg ctc tcc ggg gcc acg 48
Met Pro Leu Ser Pro Gly Leu Leu Leu Leu Leu Ser Gly Ala Thr
1 5 10 15

gcc acc gct gcc ctg ccc ctg gag ggt ggc ccc acc ggc cga gac agc 96
Ala Thr Ala Ala Leu Pro Leu Glu Gly Gly Pro Thr Gly Arg Asp Ser
20 25 30

Sub
E22
cont

gag cat atg cag gaa gcg gca gga ata agg aaa agc agc ctc ctg act 144
 Glu His Met Gln Glu Ala Ala Gly Ile Arg Lys Ser Ser Leu Leu Thr
 35 40 45

ttc ctc gct tgg tgg ttt gag tgg acc tcc cag gcc agt gcc ggg ccc 192
 Phe Leu Ala Trp Trp Phe Glu Trp Thr Ser Gln Ala Ser Ala Gly Pro
 50 55 60

ctc ata gga gag gaa gct cgg gag gtg gcc agg cgg cag gaa ggc gca 240
 Leu Ile Gly Glu Glu Ala Arg Glu Val Ala Arg Arg Gln Glu Gly Ala
 65 70 75 80

ccc ccc cag caa tct gcg cgc cgg gac aga atg ccc tgc agg aac ttc 288
 Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro Cys Arg Asn Phe
 85 90 95

ttc tgg aag acc ttc ttc tcc tgc aaa taa 318
 Phe Trp Lys Thr Phe Ser Ser Cys Lys
 100 105

<210> 111

<211> 105

<212> PRT

<213> Homo sapiens

<400> 111

Met Pro Leu Ser Pro Gly Leu Leu Leu Leu Leu Leu Ser Gly Ala Thr
 1 5 10 15

Ala Thr Ala Ala Leu Pro Leu Glu Gly Gly Pro Thr Gly Arg Asp Ser
 20 25 30

Glu His Met Gln Glu Ala Ala Gly Ile Arg Lys Ser Ser Leu Leu Thr
 35 40 45

Phe Leu Ala Trp Trp Phe Glu Trp Thr Ser Gln Ala Ser Ala Gly Pro
 50 55 60

Leu Ile Gly Glu Glu Ala Arg Glu Val Ala Arg Arg Gln Glu Gly Ala
 65 70 75 80

Pro Pro Gln Gln Ser Ala Arg Arg Asp Arg Met Pro Cys Arg Asn Phe
 85 90 95

Phe Trp Lys Thr Phe Ser Ser Cys Lys
 100 105

<210> 112

<211> 105

<212> PRT

<213> Homo sapiens

<400> 112

Met Pro Leu Ser Pro Gly Arg Asp Ser Glu His Met Gln Glu Ala Ala
 1 5 10 15

*Sub
E22
cont*

Gly Ile Arg Lys Ser Ser Glu Ala Arg Glu Val Ala Arg Arg Gln Glu
20 25 30

Gly Ala Pro Pro Gln Gln Ser Gly Leu Leu Leu Leu Leu Ser Gly
35 40 45

Ala Thr Ala Thr Ala Ala Leu Pro Leu Glu Gly Gly Pro Thr Leu Leu
50 55 60

Thr Phe Leu Ala Trp Trp Phe Glu Trp Thr Ser Gln Ala Ser Ala Gly
65 70 75 80

Pro Leu Ile Gly Glu Ala Arg Arg Asp Arg Met Pro Cys Arg Asn Phe
85 90 95

Phe Trp Lys Thr Phe Ser Ser Cys Lys
100 105

<210> 113

<211> 112

<212> PRT

<213> Rattus

<400> 113

Met Gly Gly Cys Ser Thr Arg Gly Lys Arg Pro Ser Pro Thr Gly Gln
1 5 10 15

Asp Ser Val Gln Asp Ala Thr Gly Gly Arg Arg Thr Gly Gly Thr Pro
20 25 30

Glu Leu Ser Lys Arg Gln Glu Arg Pro Pro Leu Gln Gln Pro Ala Leu
35 40 45

Ser Leu Leu Leu Leu Leu Leu Leu Ser Gly Ile Ala Ala Ser Ala Leu
50 55 60

Pro Leu Glu Ser Gly Leu Leu Thr Phe Leu Ala Trp Trp His Glu Trp
65 70 75 80

Ala Ser Gln Asp Ser Ser Ser Thr Ala Phe Glu Gly Pro His Arg Asp
85 90 95

Lys Lys Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Ser Ser Cys Lys
100 105 110

<210> 114

<211> 116

<212> PRT

<213> Rattus

<400> 114

Met Leu Ser Cys Arg Leu Gln Cys Ala Leu Ala Ala Leu Cys Ile Val
1 5 10 15

Sub
E22
cont

Leu Ala Ala Thr Gly Lys Gln Glu Leu Ala Lys Tyr Phe Leu Ala Glu
20 25 30

Leu Leu Glu Met Arg Leu Glu Leu Gln Arg Ser Ala Asn Ser Asn Pro
35 40 45

Ala Met Ala Ala Leu Gly Gly Val Thr Gly Ala Pro Ser Asp Pro Arg
50 55 60

Leu Arg Gln Phe Leu Gln Lys Ser Leu Ala Ser Glu Pro Asn Gln Thr
65 70 75 80

Glu Asn Asp Ala Leu Glu Pro Glu Asp Leu Pro Gln Ala Ala Glu Gln
85 90 95

Asp Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr
100 105 110

Phe Thr Ser Cys
115

Sub
E22